

Treatment of Sinuses in Cases of Tuberculous Cervical Lymphadenitis

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ABSTRACT

Purpose of study: To see frequency of tuberculosis in cases of cervical lymphadenitis.

Introduction: Tuberculosis is one of the commonest chronic communicable diseases of the third world. Despite the decline of pulmonary tuberculosis in the western world the incidence of cervical mycobacterial infections has remained relatively unaffected.

Place of study: ENT Department, Services Hospital, Lahore

Duration: September 2005 to February 2006

Patients and methods: All patients having cervical lymphadenitis with or without sinus/ulcer formation having more than six weeks of duration and without any active sign of acute inflammation attending the outdoor of department of ENT Services hospital Lahore were selected for the study.

Conclusion: Surgical excision of sinuses along with affected underlying caseating lymph node followed by anti-tuberculous chemotherapy is an effective treatment of tuberculous cervical lymphadenitis complicated by sinus formation.

Key words: Cervical lymphadenitis, tuberculosis, sinuses

INTRODUCTION

Tuberculosis is one of the commonest chronic communicable diseases of the third world. Despite the decline of pulmonary tuberculosis in the western world the incidence of cervical mycobacterial infections has remained relatively unaffected.

Tuberculosis is caused by bacteria belonging to mycobacterium tuberculosis complex. In most instances of cervical lymphadenopathy the bacteria gain entrance through the ipsilateral tonsil. Infection entry through the carious teeth, tonsil¹ or adenoids usually involves the upper deep cervical nodes whereas involvement of lower cervical nodes indicates infection commonly from the apex of the corresponding lungs².

Tuberculous cervical lymphadenitis develops in four stages. First is stage of lymphadenitis in which there is inflammation inside the lymph node. Second is the stage of periadenitis where inflammation occurs around the lymph node causing matted nodes. Third stage is of caseation with formation of cold abscess. Last stage is of ulceration/sinus formation. The disease is usually confirmed by the histological presence of caseating granulomata and acid fast bacilli³.

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PATIENTS AND METHODS

All patients having cervical lymphadenitis with or without sinus/ulcer formation having more than six weeks of duration and without any active sign of acute inflammation attending the outdoor of department of ENT Services hospital Lahore were selected for the study during the period of six months from September 2005 to February 2006.

After admission in the ward, proper history with clinical examination was done of all the patients. All patients were advised for investigations for hematological profile with ESR, x-ray of the chest PA view, mantoux test and excisional biopsy of lymph node including sinus (if present). After the biopsy of the lymph node the patients were given the course of prophylactic antibiotics along with anti-inflammatory analgesics. Those patients who did not have tuberculosis in their lymph nodes by histopathological examination were excluded from the study.

All tuberculous positive patients were advised anti-tuberculous chemotherapy. It includes rifampicin, isoniazide, ethambutol and pyrazinamide for initial two months followed by rifampicin and isoniazide for next four months. Follow-up was done after four months, six months and one year. No recurrence was found during this time.

RESULTS

The ages of the patients ranged from 12 years to 50 years. Maximum number of patients were between 20 to 30 years (40%) followed by patients in 12 to 19 years age group (30%). Regarding gender of the

patients females were 29 and males 21. The duration of enlargement of lymph nodes ranged from 5 weeks to 230 weeks. Out of 50 cases only 5 patients were found to develop ulceration or sinus formation. Similarly all these 5 patients were treated with excision of sinuses along with the caseated lymph node. This was followed by course of anti-tuberculous chemotherapy and no recurrence was noted during their follow-up period.

DISCUSSION

This study was done to see frequency of tuberculosis in cases of cervical lymphadenitis. In our study out of 50 patients 5 were complicated by sinus or ulcer formation. Similar study was done by Siu et al, in which 80 cases of tuberculous lymphadenopathy confirmed by histological examination and 7 cases developed sinus formation⁴.

Seth et al. in their study found 10% of the total patients had discharging sinus⁵. Similar study was done by Campbell et al in which 108 patients were studied and they found fluctuation in 11%, sinus formation in 7% and breakdown of surgical scar in 4%⁶. These findings are almost similar to our study.

Jawahar has mentioned that disease usually present as a painless lymphadenopathy of the superficial lymph nodes which may proceed to abscess and sinus formation, if neglected⁶.

Similarly Jha et al also studied cases of tuberculous cervical lymphadenitis in which they mentioned that discharging sinus and abscess formation were uncommon⁷. Therefore it seems logical that the terminal active stage of tuberculous lymphadenitis is abscess formation followed by the discharge of caseous material and this stage is seen in the malnourished, the immune compromised or those who don't take therapy. Regarding treatment of tuberculous cervical lymphadenitis leading to sinus

formation we performed excision of sinus in every case along with excision of involved caseating lymph nodes followed by a short course of anti-tuberculous therapy and it was found to be very effective without any recurrence. Weiler et al in their series found that anti-tuberculous therapy with or without surgical excision of involved lymph node is the method of choice⁸.

CONCLUSION

Surgical excision of sinuses along with affected underlying caseating lymph node followed by anti-tuberculous chemotherapy is an effective treatment of tuberculous cervical lymphadenitis complicated by sinus formation.

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